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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,971	02/24/2004	Chia-Wen Lin	04125-URL	4097

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LIN & ASSOCIATES INTELLECTUAL PROPERTY
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EXAMINER	
RAO, ANAND SHASHIKANT	

ART UNIT	PAPER NUMBER
2621	

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/786,971	LIN ET AL.	
	Examiner	Art Unit	
	Andy S. Rao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6-10 and 18* is/are rejected.

7)☒ Claim(s) *3-5,11-17 and 19-23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/24/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-2, 6-10, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Reibmann et al., (hereinafter referred to as "Reibmann").

Reibmann discloses a fine granularity scalable encoder (Reibmann: figure 2) comprising: a base-layer encoding block including a coarse prediction loop, said coarse prediction loop having a coarse prediction output (Reibmann: column 4, lines 30-35: figure 2, element 240); an enhancement-layer encoding block including a fine prediction loop and an enhancement-layer mode selector, said fine prediction loop having a fine prediction output (Reibmann: column 4, lines 30-35; figure 2, element 241); wherein said encoder operates in a mix prediction mode when said enhancement- layer mode selector is switched to select said fine prediction output, and said encoder operates in an all-coarse prediction mode when said enhancement-layer mode selector is switched to select said coarse prediction output (Reibmann: column 4, lines 1-10), as in claim 1.

Regarding claim 2, Reibmann discloses that said base-layer encoding block further comprising a base-layer mode selector, wherein said encoder operates in an all-fine prediction mode when both said base-layer mode selector and said enhancement-layer mode selector are switched to select said fine prediction output (Reibmann: column 4, lines 34-39), said encoder operates in an all-coarse prediction mode when both said base-layer mode selector and said enhancement-layer mode selector are switched to select said coarse prediction output, and said encoder operates in a mix prediction mode when said base-layer mode selector is switched to select said coarse prediction output and said enhancement-layer mode selector is switched to select said fine prediction output (Reibmann: column 4, line 45-50), as in claim 2.

Reibmann discloses a fine granularity scalable decoder (Reibmann: figure 1) comprising: a base-layer decoding block including a coarse prediction loop, said coarse prediction loop having a coarse prediction output (Reibmann: column 3, lines 25-35: figure 1, element 140); an enhancement-layer decoding block including a line prediction loop and an enhancement-layer mode selector, said fine prediction loop having a fine prediction output (Reibmann: column 3, lines 25-35; figure 1, element 141); wherein said decoder operates in a mix prediction mode when said enhancement- layer mode selector is switched to select said fine prediction output (Reibmann: column 3, lines 45-50), and said decoder operates in an all-coarse prediction mode when said enhancement-layer mode selector is switched to select said coarse prediction output (Reibmann: column 4, lines 1-10), as in claim 6.

Regarding claim 7, Reibmann discloses that said base-layer decoding block further comprising a base-layer mode selector (Reibmann: column 3, lines 55-60), wherein said decoder operates in an all-fine prediction mode when both said base-layer mode selector and said enhancement-layer mode selector are switched to select said fine prediction output (Reibmann: column 3, lines 25-30: "fine" frame memory), said decoder operates in an all-coarse prediction mode when both said base-layer mode selector and said enhancement-layer mode selector are switched to select said coarse prediction output (Reibmann: column 3, lines 25-30: "coarse" frame memory), and said decoder operates in a mix prediction mode when said base-layer mode selector is switched to select said coarse prediction output and said enhancement-layer mode selector is switched to select said fine prediction output (Reibmann: column 4, lines 1-10), as in the claim.

Reibmann discloses an encoding method having at least two coding modes (Reibmann: figure 3), said method comprising the steps of: (a) collecting encoding parameters from each macroblock of a plurality of macroblocks of input signals (Reibmann: column 6, lines 10-35); (b) analyzing said encoding parameters to determine a coding mode for each macroblock (Reibmann: column 5, lines 25-35); and (c) encoding each macroblock according to the coding mode determined in said step (Reibmann: column 4, lines 30-40), as in claim 8.

Regarding claim 9, Reibmann discloses wherein said plurality of macroblocks are classified in said step (b) into at least two coding groups and each macroblock in a coding group is assigned with a same coding mode (Reibmann: column 7, lines 30-60), as in the claim.

Regarding claim 10, Reibmann discloses wherein said encoding method has an all-coarse prediction mode, an all-fine prediction mode, and a mix prediction mode, and said plurality of macroblocks are classified in said step (b) into an all-coarse prediction group in which each macroblock is assigned with said all-coarse prediction mode (Reibmann: column 3, lines 25-30: "coarse" frame memory), an all-fine prediction group in which each macroblock is assigned with said all-fine prediction mode (Reibmann: column 3, lines 25-30: "fine" frame memory) and a mix prediction group in which each macroblock is assigned with said mix prediction mode (Reibmann: column 4, lines 1-10), as in the claim.

Reibmann discloses method for truncating bit-planes in an enhancement layer of a group of pictures for allocating bits sent to a client channel (Reibmann: figure 3), comprising the steps of: (a) performing low-rate bit truncation if total bits available for allocation for said enhancement layer are less than or equal to total number of enhancement-layer bits in all I/P-frames in said group of pictures used for fine prediction (Reibmann: column 5, lines 60-67); (b)

performing medium-rate bit truncation if total bits available for allocation for said enhancement layer are less than or equal to total number of enhancement-layer bits in said group of pictures used for fine prediction but greater than total number of enhancement-layer bits in all I/P-frames in said group of pictures used for fine prediction (Reibmann: column 6, lines 1-10); and (c) performing high-rate bit truncation if total bits available for allocation for said enhancement layer are greater than total number of enhancement-layer bits in said group of pictures used for fine prediction (Reibmann: column 6, lines 30-67), as in claim 18.

Allowable Subject Matter

4. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim 1 and any intervening claim 2.

5. Claims 11-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim 8.

6. Claims 19-22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if claims 19 and 23 are rewritten in independent form including all of the limitations of the base claim 18.

7. If rejected claims 1-2, 6-10, and 18 are canceled, and if claims 3-5, 11-17, and 19-23 are amended as indicated above, the application would be placed in a condition for allowance.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu discloses seamless splitting of scalable video bitstreams.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
November 7, 2006

ANDY RAO
PRIMARY EXAMINER